

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-61. (Cancelled).

62. (New) A screening arrangement to test for presence of a compound in a fluid specimen, comprising:

a support cartridge having at least one elongate immunoassay test strip mounted thereon to which a fluid specimen is applied for testing for the presence of a compound in the specimen, the test strip including a test membrane having at least one test zone that changes reflectivity as a function of the amount of the compound in the specimen, at least one control zone that changes reflectivity upon contact with the specimen, and a background zone between the test and control zones which is not significantly influenced by the specimen;

a screening device for mounting thereon the support cartridge and cooperating with the test strip associated therewith for testing for the presence of the compound when the fluid specimen is applied to the test strip;

said screening device being small and portable, and including:

a receiving bracket removably mounting the support cartridge and the test strip carried thereon in a predefined stationary testing position so that an exposed surface of the membrane faces generally upwardly,

a photosensitive detector assembly stationarily interconnected to and positioned adjacent said receiving bracket and directed toward a region directly above the upper surface of the test strip for receiving light reflected by the test membrane, said photosensitive

detector assembly generating output signals representative of the concentration of light reflected by the test, control and background zones of the test membrane,

a mirror arrangement interconnected to and positioned adjacent said receiving bracket and oriented for receiving light reflected from the test membrane and redirecting it to the photosensitive detector assembly,

a processor connected to said photosensitive detector assembly to receive the output signals therefrom and configured, based on the output signals, (1) to evaluate the concentration of light reflected from the control zone to determine if the assay test has been successfully run and (2) to evaluate the concentration of light reflected from the test zone and to generate output data representative of the presence of the compound in the specimen;

a visual display disposed adjacent one side of the screening device and connected to the processor for receiving the output data; and

means for supplying d.c. voltage to the portable screening device for supplying power for operation thereof;

whereby said lightweight and portable screening device, in conjunction with the support cartridge bearing the test strip thereon, can be easily and flexibly utilized for testing the fluid sample while providing flexibility with respect to its handling and location of use.

63. (New) A screening arrangement according to Claim 62, wherein:

said processor is connected to said display and is configured to control actuation of the display so that if the test is not successful, said processor causes said display to generate a message indicating the test is not successful, and if the test is successful said processor causes said display

to generate a message indicating the presence/absence of the compound in the specimen.

64. (New) The screening arrangement according to Claim 62, wherein the screening device mounts therein a visual indicator light for indicating when a test is in process and has been completed.

65. (New) A testing arrangement according to Claim 62, wherein the support cartridge has a swab-receiving structure fixedly associated with one end thereof and providing fluid communication with the test strip so that, when a swab having the fluid specimen thereon is inserted into the swab-receiving structure, the specimen is placed in fluid communication with the test strip; and

said swab-supporting structure and the swab engaged therewith being positioned sidewardly from the upper exposed surface of the test membrane so as to not interfere with the testing device when the support cartridge is mounted on the receiving bracket.

66. (New) The screening arrangement according to Claim 62, wherein said screening device includes a position detector positioned adjacent the receiving bracket for sensing when the support cartridge is properly supported and positioned on the receiving bracket for permitting initiating of a test.

67. (New) A screening arrangement according to Claim 62, wherein the screening device includes a battery arrangement carried therewith for supplying d.c. voltage for powering the screening device.

68. (New) An arrangement according to Claim 67, wherein the display is oriented vertically adjacent an opposite side of the screening device, and wherein the photosensitive

detector assembly, the processor and the battery arrangement are all positioned generally between the display and the receiving bracket.

69. (New) A screening arrangement according to Claim 62, wherein the receiving bracket defines a generally horizontally open guide track which cooperates with the support cartridge so as to enable the support cartridge to be horizontally slidably inserted into the support track for disposition in said predetermined position.

70. (New) A screening arrangement according to Claim 62, wherein the screening device has a maximum weight of approximately 300 grams.

71. (New) A screening arrangement according to Claim 62, wherein the light arrangement includes a plurality of lights disposed above the receiving bracket to individually emit light downwardly toward the exposed upper surface of the test membrane, each said light emitting a different light frequency.

72. (New) The testing arrangement according to Claim 62, wherein the processor is configured to evaluate the concentration of light reflected from the control zone relative to the concentration of light reflected from the adjacent background zone to determine if the assay test has been successfully run, and wherein the processor is further configured to evaluate the concentration of light reflected from the test zone relative to the concentration of light reflected from the adjacent background zone to generate data representative of the compound in the specimen.

73. (New) The testing arrangement according to Claim 62, wherein the screening device is a portable unitized assembly.